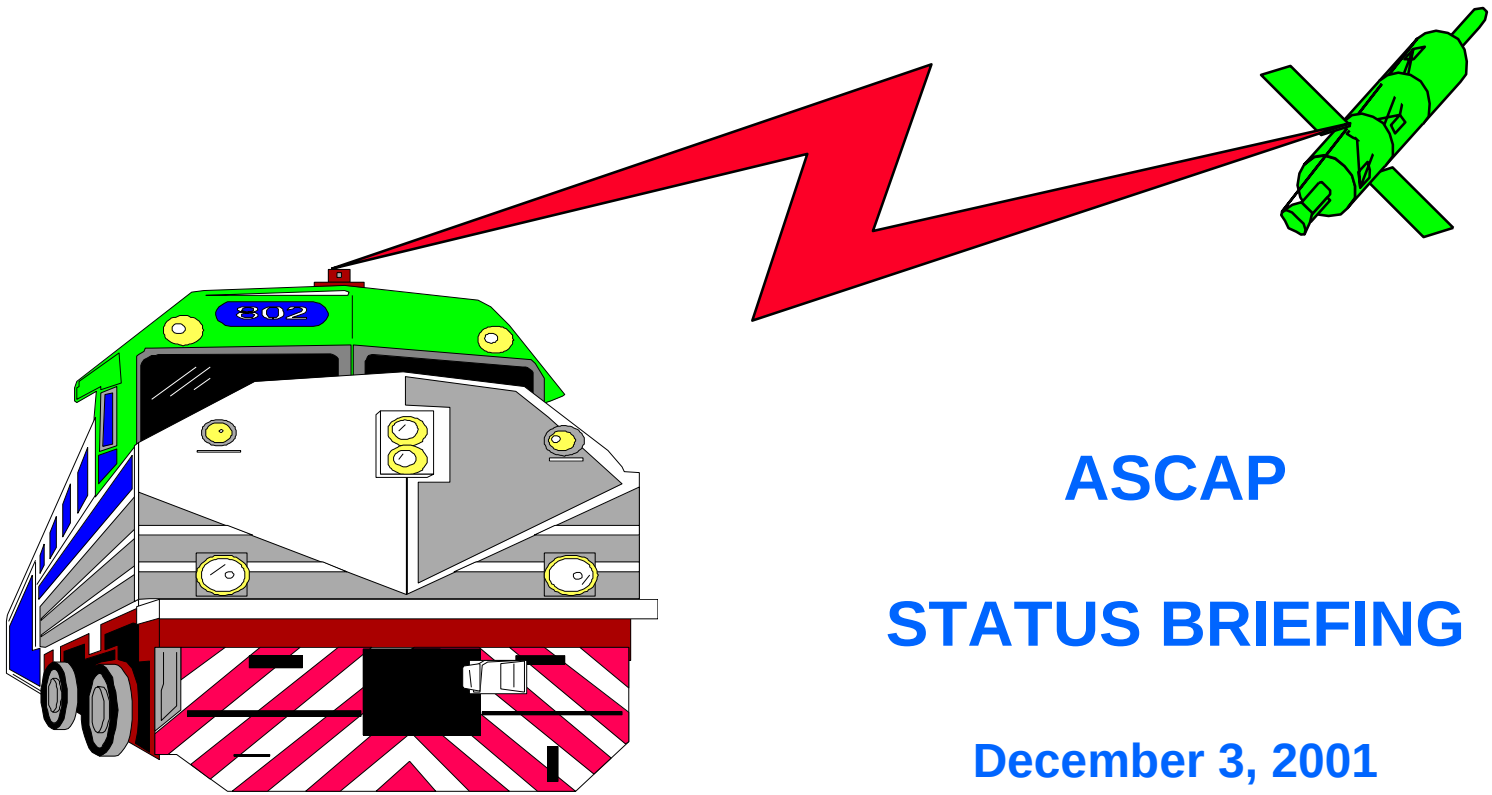

ASCAP

STATUS BRIEFING

December 3, 2001

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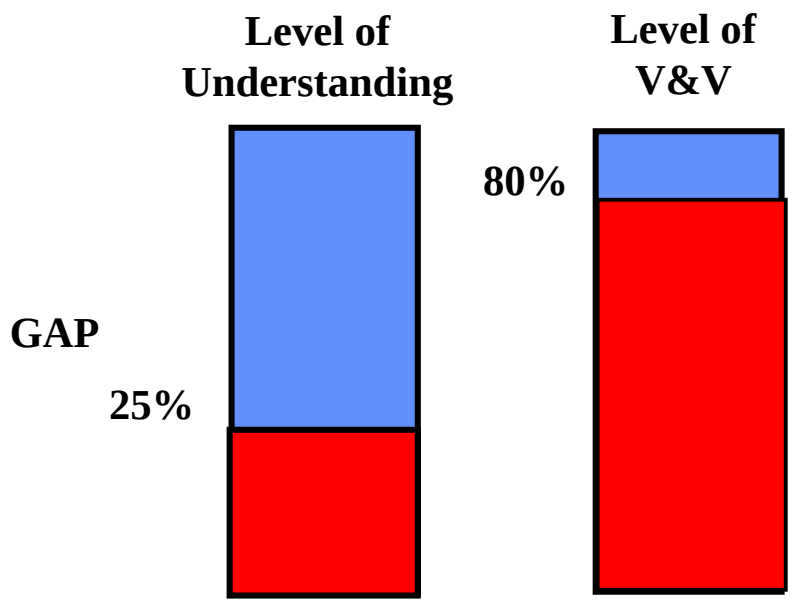
CSX DTC/CBTM PUNCH LIST

ASCAP PROCESS GAP



SOLUTION: Publish Risk Assessment Text Book

CSX DTC/CBTM PUNCH LIST

- **Train Movement Algorithm (TMA)**
- **PURPOSE: Determine the Risk Exposure**
  - **Enhance with Dynamic Train Model**
  - **Develop Base Case Train Movement Exposure Check Solution**
  - **Demonstrate that DTC/CBTM TMA Exposure Solution is Acceptable**

CSX DTC/CBTM PUNCH LIST

- **ASCAP SEVERITY MODEL**
- **PURPOSE: Present Risk as Societal Cost versus Train Miles**
  - **Develop the Process to Transform Mishaps-to-Accidents**
  - **Consider Transformation from Mishaps-to-Incidents-to-Accidents**
  - **Present Accidents as Societal Cost**
  - **Embed the Severity Model in the ASCAP Simulation**

CSX DTC/CBTM PUNCH LIST

- **HUMAN-FACTORS**
- **PURPOSE: Provide Creditable Human-factors Model**
  - **Review Data Provided by FRA the Human-factors Team**
  - **Evaluate How to Map FRA Model into the ASCAP Frame Work**
    - **Probability of Stimuli Reorganization**
    - **Probability of Stimuli Error**
    - **Probability of Stimuli Coverage**
    - **Probability of Stimuli Rule Compliance**

CSX DTC/CBTM PUNCH LIST

- **Prepare ASCAP FRA Model/Data Integration Plan**
- **Review Human-factors Sensitivity Experiments**
- **Submit Plan to the FRA for Approval**

CSX DTC/CBTM PUNCH LIST

- **MONTE CARLO INDEPEDNENCE VALIDATION & VERIFICATION**
- **PURPOSE: Establish the Independence of each Simulation Trial**
  - **Establish the Real-World Events that Repeat**
  - **Establish the Independence Properties of the Random Number Generator**
  - **Establish the Millions of Train Miles Traveled before Trial Repeats**

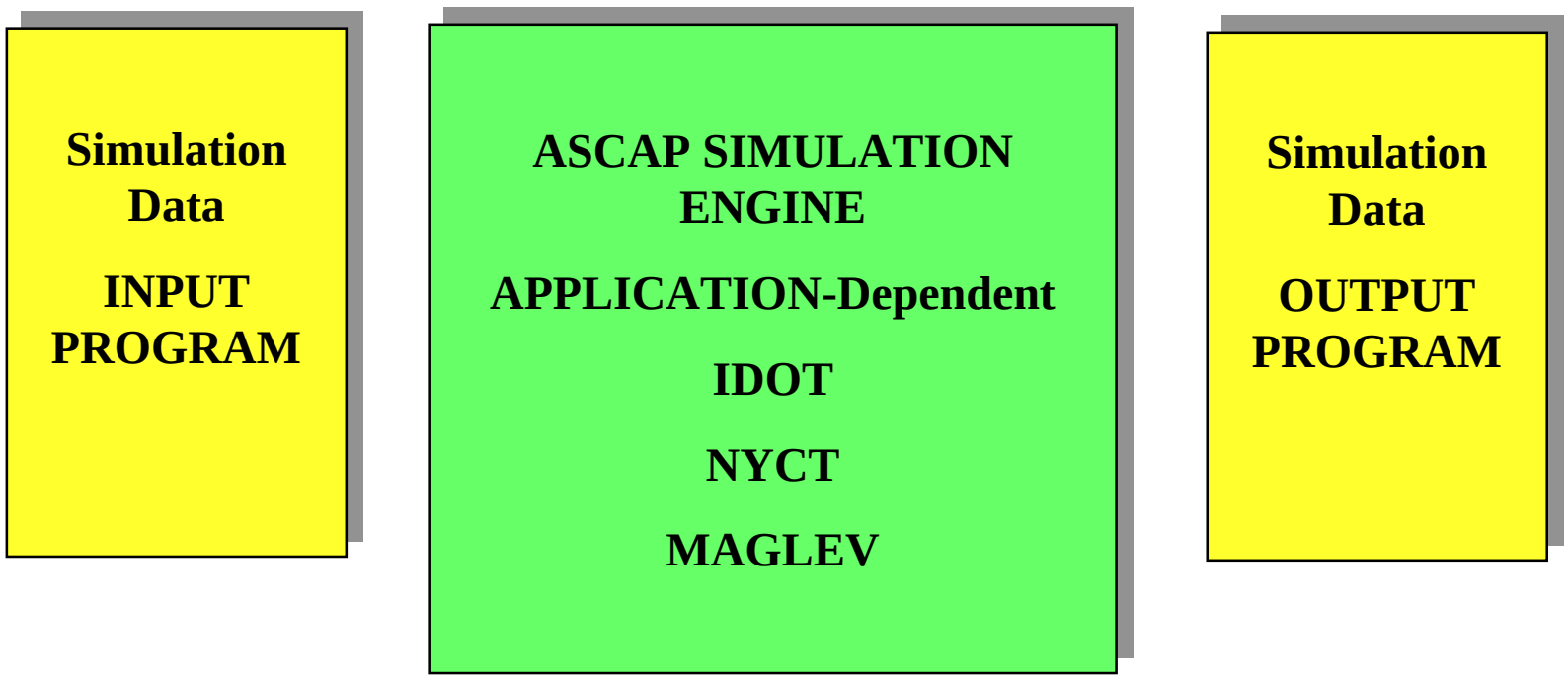
CSX DTC/CBTM PUNCH LIST

- **FINALIZE SAFETY-CASE WITH FRA APPROVAL**
- **PURPOSE: Submit Safety-Case Final Version**
  - **Establish with the FRA the Safety-Case Experiments**
  - **Make Safety-Case Revisions as Required by the FRA**

IDOT, NYCT AND MAGLEV ASCAP PROGRAMS

Version 2.00

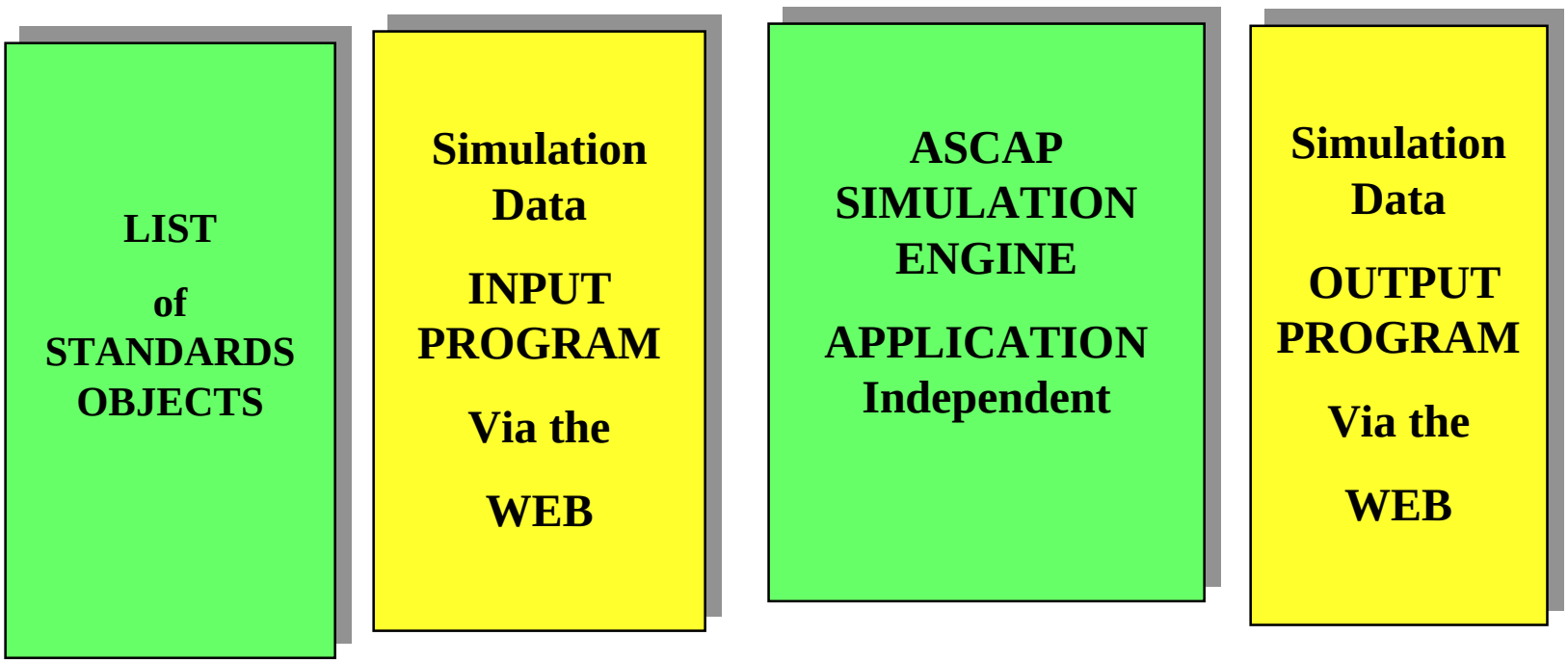
ASCAP Application-dependent Simulation Organization



ASCAP++ Next Generation

Version: 3.00

ASCAP Application-Independent Simulation Organization



ASCAP++ Next Generation

- **Formal V & V of all Objects and Agents**
- **Formal V &V of the Application-Independent Engine**
- **Operation via the WEB**